

IN THE CLAIMS

Please amend the following claims.

1. (currently amended) A method of forming copper interconnect, comprising:  
forming a dielectric layer over a substrate, the dielectric layer having trenches therein;  
forming a copper diffusion barrier at least in the trenches;  
depositing copper over the copper diffusion barrier and over a top surface of the dielectric layer; and

31 polishing the copper with a high pH slurry comprising 2-10 wt% silica, an oxidizer comprising  $\text{Fe}(\text{CN})_6^{-3}$ , a corrosion inhibitor, and a pH between 8-11.5 ~~having less than or equal to 10 wt% of abrasive.~~

2. (original) The method of Claim 1, wherein the dielectric layer comprises an oxide of silicon, and the copper diffusion barrier is electrically conductive.

- 21 3. (original) The method of Claim 1, wherein the dielectric layer comprises a fluorinated oxide of silicon, and the copper diffusion barrier is selected from the group consisting of tantalum, and tantalum nitride.

Claims 4 - 7 (cancelled)

8. (original) The method of Claim 1, wherein polishing comprises chemical mechanical polishing with a down force of less than or equal to approximately 3.75 psi.

9. (original) The method of Claim 1, wherein polishing comprises:  
engaging the copper with a polishing pad with a down force less than or equal to 3.75  
psi; and  
providing a slurry flow rate of approximately 200 ccm.

10. (original) The method of Claim 9, wherein polishing further comprises an orbital  
speed of approximately 310 rpm and a wafer rotational speed of approximately 10 rpm.

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11. (currently amended) A method of polishing a copper film, comprising:  
polishing the copper film with a slurry comprising 2-10 wt% silica, an oxidizer  
comprising  $(\text{NH}_4)_2\text{S}_2\text{O}_8$ , a corrosion inhibitor, a sulfate getter, and a pH between 8-11.5  
having a pH and composition such that a protective layer is formed over the copper film  
ant during polishing.

Claims 12 – 33 (cancelled)

